

CLAIMS

1. A radiation-sensitive resin composition for forming optical waveguides, which comprises: (A) a novolac type epoxy resin; and
5 (B) a photo-acid generator.

2. The radiation-sensitive resin composition for forming optical waveguides according to Claim 1, wherein the component (A) has an epoxy equivalent of 50 to 1,000 g/eq.

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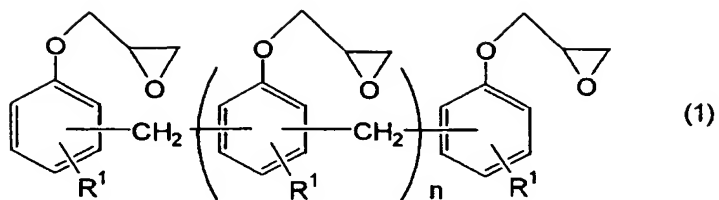
3. The radiation-sensitive resin composition for forming optical waveguides according to Claim 1 or 2, wherein a cured product of the radiation-sensitive resin composition has a refractive index (n_D^{25}) of 1.55 or more.

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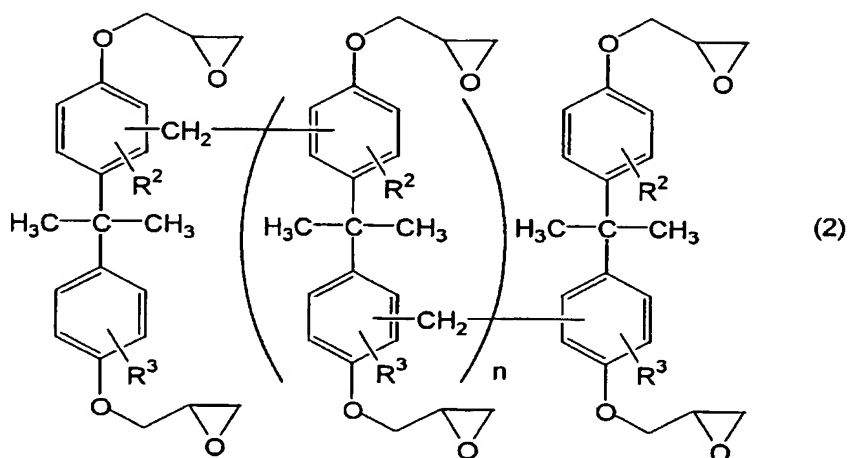
4. The radiation-sensitive resin composition for forming optical waveguides according to any one of Claims 1 to 3, wherein a cured product of the radiation-sensitive resin composition has a glass-transition temperature of 100 degree C. or higher.

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5. The radiation-sensitive resin composition for forming optical waveguides according to any one of Claims 1 to 4, wherein the component (A) is a novolac type epoxy resin represented by the following general formula (1), (2), or (3)

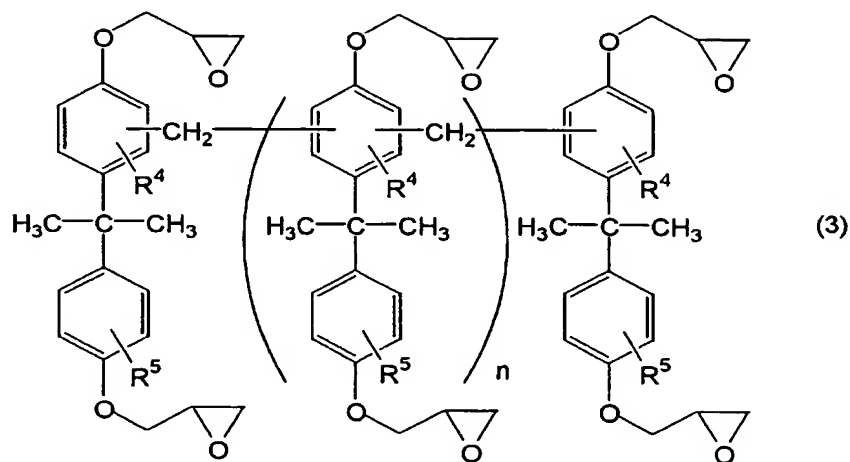


(in the formula, R^1 is a hydrogen atom, an alkyl group having 1 to 12 carbon atoms, or an aralkyl group; and n is an integer from 0 to 10)



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(in the formula, R^2 and R^3 are each independently a hydrogen atom, an alkyl group having 1 to 12 carbon atoms, or an aralkyl group; and n is an integer from 0 to 10)



(in the formula, R^4 and R^5 are each independently a hydrogen atom, an alkyl group having 1 to 12 carbon atoms, or an aralkyl group; and n is an integer from 0 to 10).

6. An optical waveguide, which comprises a lower clad layer,
5 a core portion, and an upper clad layer, wherein at least one selected from the lower clad layer, the core portion, and the upper clad layer is a cured product of the resin composition according to any one of Claims 1 to 5.